

Title (en)

COMPOSITION FOR FORMING A PATTERNED METAL FILM ON A SUBSTRATE

Title (de)

VERFAHREN ZUR BILDUNG EINES STRUKTURIERTEN METALLFILMS AUF EINEM SUBSTRAT

Title (fr)

COUCHES MÉTALLIQUES CONDUCTRICES TRANSPARENTES

Publication

**EP 3887463 A4 20220126 (EN)**

Application

**EP 19892623 A 20191204**

Priority

- US 201862776627 P 20181207
- IB 2019060441 W 20191204

Abstract (en)

[origin: WO2020115680A1] A method for growing a transparent conductive metal layer on a substrate is disclosed. The method includes the steps of applying crystal growth ink to a surface of the substrate, wherein the crystal growth ink includes a metal ionic precursor; and exposing the substrate to plasma irradiation to cause the growing of a crystalline metal framework on the substrate, wherein the exposure is based on a set of predefined exposure parameters.

IPC 8 full level

**C09D 11/52** (2014.01); **C09D 5/24** (2006.01); **C09D 11/101** (2014.01); **C23C 18/14** (2006.01); **C23C 18/31** (2006.01); **C30B 7/06** (2006.01)

CPC (source: EP US)

**B05D 3/145** (2013.01 - US); **C09D 1/00** (2013.01 - EP US); **C09D 5/24** (2013.01 - EP US); **C09D 11/033** (2013.01 - EP); **C09D 11/037** (2013.01 - EP); **C09D 11/322** (2013.01 - EP); **C09D 11/36** (2013.01 - EP); **C09D 11/52** (2013.01 - EP); **C23C 18/08** (2013.01 - EP); **C23C 18/145** (2019.04 - EP)

Citation (search report)

- [X] WO 2018049322 A1 20180315 - ORELTECH LTD [IL], et al
- [X] WO 2018140430 A1 20180802 - ORELTECH LTD [IL], et al
- [X] US 2017218218 A1 20170803 - ZAMOSHCHIK NATALIA [IL]
- [X] US 2018297387 A1 20181018 - MILLER CHRISTOPHER J [US], et al
- [X] US 2007184208 A1 20070809 - SHARMA ASHOK K [IN], et al
- See references of WO 2020115680A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2020115680 A1 20200611**; CN 113383046 A 20210910; EP 3887463 A1 20211006; EP 3887463 A4 20220126; EP 3887463 B1 20230913; US 2021309868 A1 20211007

DOCDB simple family (application)

**IB 2019060441 W 20191204**; CN 201980090638 A 20191204; EP 19892623 A 20191204; US 202117340719 A 20210607